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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,441	09/13/2004	Goran Sundholm	U 015367-5	2988
140	7590	05/04/2006	EXAMINER	
LADAS & PARRY 26 WEST 61ST STREET NEW YORK, NY 10023			RIVELL, JOHN A	
			ART UNIT	PAPER NUMBER
			3753	

DATE MAILED: 05/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/507,441

Applicant(s)

SUNDHOLM, GORAN

Examiner

John Rivell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/13/04 (application).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☒ Claim(s) 3, 4, 7, 9, 10, 12 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>09132004</u> . | 6) <input type="checkbox"/> Other: _____ |

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By preliminary amendment filed concurrently with the application, new claims 7-14 have been added. Thus claims 1-14 are pending.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1 and 4, the phrase "or the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Claims 5, 6 and 8-14 recite the limitation "the cylinder space". There is insufficient antecedent basis for this limitation in the claim. Additionally, each of claims 5, 8, 9, and 10 recite the limitation "the cylinder". There is insufficient antecedent basis for this limitation in the claim.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 5 are rejected under 35 U.S.C. §102 (b) as being anticipated by Grant Jr., et al.

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The patent to Grant Jr., et al. discloses a "valve element (generally at valve body 15 of figure 1), comprising a main body, at least one inlet (at 14) and at least one outlet (at 16), a passage connecting the inlet and outlet, at least one burst disk (rupture disk) (32) or equivalent, which, when unbroken, closes the passage from inlet to outlet, and a piston element (20) provided with a piercing element (39) or the like for piercing the burst disk (32), characterized in that the piston element (20) is provided with a passage (the "hollow" of hollow tubular cutter 32) for a pressure medium, said passage extending axially through the piston element (20) from one first side to one second side (e.g. end to end), that the piston element (20) is provided with a second burst disk (at 49) or equivalent which, when unbroken, closes the passage (i.e. "hollow) provided in the piston element (20), and that the device comprises means (read on a fluid pressure differential across the disc 49, see below) for piercing the second burst disk (49)" as recited in claim 1.

Regarding claim 5, in Grant Jr., et al., "the second burst disk (49), when unbroken, closes the connection from the inlet (at 14, passage 22) to the cylinder space (of the enlarged piston head of piston 20, from chamber 19), at least to the piston side of the cylinder" as recited.

Concerning claim 1 and the recitation "means for piercing", the recitation "means for piercing" invokes 35 USC 112 6th paragraph as it concerns the determination of the scope of the recited term "means". This means plus function language shall be construed to cover the corresponding structure described in the specification and equivalents thereof. Accordingly, the specification must be consulted to determine any

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equivalents to the term "means". As set forth, applicant does not describe any equivalent structure capable of performing the recited "means" function. As the specification is silent as to the nature of any equivalents, it is incumbent upon the Examiner to determine reasonable equivalents to the recited "means". The pressure differential across disc 49 of Grant Jr., et al. performs the same function as the recited "means". This pressure differential is not excluded by any explicit definition in the originally filed specification. The pressure differential acting on the disc 49 of Grant Jr., et al. is an equivalent of the "means" recited.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grant Jr., et al. in view of Mapes (U.S. Pat. No. 1,781,854).

The patent to Grant Jr., et al. discloses all the claimed features with the exception of having "the piercing element... provided with at least one aperture extending from the outer surface of the piston element to the passage leading through the piston element" (claim 2).

The patent to Mapes ('854) discloses that it is known in the art to employ "at least one aperture (g^2) extending through the wall of a piercing piston (g) for the purpose of permitting the flow of fluid through and/or around the hollow piercing piston precluding dead spaces allowing fluid to accumulate and/or stagnate within the hollow piston.

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It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Grant Jr., et al. "at least one aperture" extending through the hollow piercing piston 20 for the purpose of permitting the flow of fluid through and/or around the hollow piercing piston precluding dead spaces allowing fluid to accumulate and/or stagnate within the hollow piston as recognized by Mapes ('854).

Regarding claim 8, in Grant Jr., et al., "the second burst disk (49), when unbroken, closes the connection from the inlet (at 14, passage 22) to the cylinder space (of the enlarged piston head of piston 20, from chamber 19), at least to the piston side of the cylinder" as recited.

Claims 6, 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grant Jr., et al. in view of Gurizzan et al.

The patent to Grant Jr., et al. discloses all the claimed features with the exception of having "the piston rod (16) of the piston element is sealedly fitted against the wall of the cylinder space".

The patent to Gurizzan et al. discloses that it is known in the art to employ seals, at 10, sealing the periphery of a piston 8, operative to actuate a piercing element 32, for the purpose of preventing leakage of fluid across the piston.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Grant Jr., et al. seals about the enlarged head of the piston element 20 for the purpose of preventing leakage of fluid across the piston as recognized by Gurizzan et al.

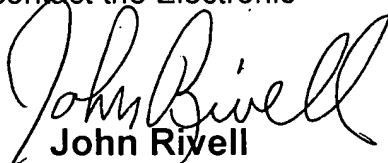
Claims 3, 4, 7, 9, 10, 12 and 13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Rivell whose telephone number is (571) 272-4918. The examiner can normally be reached on Mon.-Thur. from 6:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Keasel can be reached on (571) 272-4929. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


John Rivell
Primary Examiner
Art Unit 3753

j.r.